

Date : 2/24/2020 5:20:24 PM
From : "Tang, Shao-Jun" shtang@UTMB.EDU
To : "Yin (Whitney), Yuhui W." ywyin@UTMB.EDU
Subject : RE: support
Attachment : Tang_Shao-Jun_CV.doc;

Hi Whitney,
I attach here a copy of my CV, in case you need when you are asked for the reference.
Thanks.
Shao-Jun

From: Yin (Whitney), Yuhui W. <ywyin@UTMB.EDU>
Sent: Friday, February 21, 2020 9:32 AM
To: Tang, Shao-Jun <shtang@UTMB.EDU>
Subject: Re: support

Hi Shao-jun,

No problem! When do you need it and where should I send it to?

Whitney

Whitney Yin, MD., Ph.D
Department of Pharmacology and Toxicology
BSB 3.110
University of Texas Medical Branch
Galveston, TX77555
Tel: 409-772-9631
Email: ywyin@utmb.edu

From: Tang, Shao-Jun <shtang@UTMB.EDU>
Sent: Thursday, February 20, 2020 5:14 PM
To: Yin (Whitney), Yuhui W. <ywyin@UTMB.EDU>
Subject: support

Hi Whitney,
I was recently considered as a senior faculty candidate in the Department of Anesthesiology of the New York State University at Stony Brook (a.k.a. Stony Brook University) to potentially initiate a research center there. I plan to put you as one of my referees for this position. Thank you very much for your support! It is my guess that they would be interested in knowing my leadership and collaborative potentials, in addition to the general credentials. You may want to include some information about this aspect from your perspective as a frequently interacting collaborator and a senior colleague, in addition to whatever you wish to commend. Please keep this strictly confidential.
Thank you very much!
Shao-Jun

Shao-Jun Tang, Ph.D.
Professor and Vice Chair
Cecil H. and Ida M. Green Distinguished Chair in Neuroscience and Cell Biology
Department of Neuroscience and Cell Biology

University of Texas Medical Branch
301 University Blvd
Galveston, Texas 77555
Phone: 409-772-1190
Email: shtang@utmb.edu

CURRICULUM VITAE

NAME: SHAO-JUN TANG

DATE: 9/16/2019

PRESENT POSITION: Cecil H. and Ida M. Green Distinguished Chair in Neuroscience and Cell Biology; Professor (Tenured) and Vice Chair

CITIZENSHIP: USA, Canada

BUSINESS ADDRESS:

Department of Neuroscience and Cell Biology
University of Texas Medical Branch
301 University Boulevard
Galveston, TX 77555-1069
Tel: (409)772-1190
Fax: (949)777-4687
E-mail: shtang@utmb.edu

EDUCATION

Postdoctoral Associate, Synaptic Plasticity. 01/1998 – 10/2001

Howard Hughes Medical Institute, Division of Biology, California Institute of Technology, Pasadena, CA, USA. Advisor: Dr. Erin Schuman

Ph.D., Molecular and Developmental Biology. 01/1998

University of Toronto, Department of Molecular and Medical Genetics, Toronto, Canada
Advisors: Dr. Manuel Bachwald; Dr. Roderick McInnes (co-supervisor).

M.Sc., Molecular Biology. 09/1994

University of Toronto, Department of Molecular and Medical Genetics, Toronto, Canada.
Advisor: Dr. Martin Breitman

Graduate Student, Plant Molecular Genetics, 09/1990

Admitted to the Graduate School of Zhongshan (Sun Yat-Sen) University, Guangzhou, P. R. China
Advisor: Prof. Liangshi Liu

Diploma, Biotechnology. 07/1987

University of Hunan Science and Technology University, Department of Life Sciences, Changsha, P. R. China

BOARD CERTIFICATION: NONE

LICENSURE INFORMATION: NONE

PROFESSIONAL WORK HISTORY AND TEACHING EXPERIENCE:

09/2018 – present: Cecil H. and Ida M. Green Distinguished Chair in Neuroscience and Cell Biology, Department of Neuroscience and Cell Biology,

University of Texas Medical Branch at Galveston

08/2018 – present: Vice Chair, Department of Neuroscience and Cell Biology, University of Texas Medical Branch at Galveston

02/2014-08/2018: William Willis, Jr. MD PhD Professor in Neuroscience, Department of Neuroscience and Cell Biology, University of Texas Medical Branch at Galveston

06/2014-07/2016: Director, Neuroscience Graduate Program, University of Texas Medical Branch

09/2017-present: Professor (with tenure), Department of Neuroscience and Cell Biology, University of Texas Medical Branch at Galveston

09/2013-08/2017: Associate Professor (with tenure), Department of Neuroscience and Cell Biology, University of Texas Medical Branch at Galveston

09/2008-08/2013: Assistant Professor, Department of Neuroscience and Cell Biology, University of Texas Medical Branch at Galveston

09/2009-present: Member, Neuroscience Graduate Program, University of Texas Medical Branch at Galveston

09/2009-present: Member, Cell Biology Graduate Program, University of Texas Medical Branch at Galveston

10/2001-07/2008: Assistant Professor (tenure track), Department of Neurobiology and Behavior, University of California, Irvine.

09/2001-07/2008: Fellow, Center for Neurobiology of Learning and Memory, University of California, Irvine.

01/1998-10/2001: HHMI Postdoctoral Associate, Division of Biology, Caltech.

09/1994-01/1998: Ph. D. student with Dr. Manuel Buchwald, Department of Molecular and Medical Genetics, University of Toronto.

09/1991-09/1994: M. Sc. student with Dr. Martin Breitman, Department of Molecular and Medical Genetics, University of Toronto.

09/1987-08/1991: Research Assistant with Prof. Liangshi Liu, Biotechnology Research Center, Zhongshan (Sun Yat-Sen) University, P. R. China

RESEARCH ACTIVITIES:

<u>Area of Research</u>	<i>Mechanisms of Neuroinflammation in opioid- and HIV-associated pain pathogenesis</i>
--------------------------------	--

My research aims to elucidate the spinal molecular, synaptic and glial mechanisms underlying the pathogenesis of opioid- and HIV/AIDS-associated pain. Our current work is focused on the pathogenic role and mechanism of neuron-glia interaction, especially from the perspective of spinal neuroinflammation. The long-term goal is to develop effective approaches to prevent or reverse the pathogenic processes.

Grant Support

Current

1R01DA 050530	10/01/2019 - 09/30/2024
NIDA, NIH	US \$429,230/year (direct)
Project title: 'Cooperative mechanisms of HIV and opioids in pain pathogenesis'	
Role: Leading PI/15% (Co-PI: J.M. Chung/10%; Co-Is: Gelman/3%; Potter/3%)	

1R01NS079166	09/30/2017-8/31/2022
NINDS, NIH	US \$365,588/year (direct)
Project title: 'Pathogenic mechanism of HIV-associated pain'	
Role: PI (30% effort; Co-I: B. Gelman/3% effort)	

1R01NS095747	09/01/2016-08/31/2021
NINDS, NIH	US \$339,912/year (direct)
Project title: 'Antiretroviral therapy and neuroinflammation in the CNS'	
Role: PI (30% effort, Co-I: W. Yin/3% effort)	

1R01DA036165 (NCE)	08/15/2013-4/30/2020
NIDA, NIH	US \$249,845/year (direct)
Project title: 'Interplay of HIV-1 gp120 and opioids in astrocyte activation'	
Role: PI (30% effort; Co-Is: S. Carlton/10% effort; B. Gelman/3% effort)	

Pending

1R21MH122247	12/01/2019 - 11/30/2021
Project title 'Mechanisms Contributing to the Side-effects of Anti-retroviral Therapy'	
Role: PI (Co-PI: Y. Wairkar)	
Note: Respond to an RFA and received an impact of 36; Recommended by the PO to Council meeting for funding; pending for final funding decision	

1R01DA 04/01/2020 - 03/31/2025
Project title: 'The Glial Mechanism of HIV-Associated Synaptic

Degeneration'

Role: PI

Note: Submitted; pending scientific review

Past/Completed

1R01NS079166

09/30/2012-8/31/2017

NINDS, NIH

US \$250,000/year (direct)

Project title: 'Wnt signaling in glial activation during HIV-associated chronic pain pathogenesis'

Role: PI (30% effort; Co-I: B. Gelman/3% effort)

2R01NS03826113

07/01/2012-06/31/2016

NINDS, NIH

US \$334,688/year (total)

Project title: 'Pain Nociception and the Amygdala'

Role: Co-I

2010-05-05

06/01/2010-09/31/2013

Whitehall Foundation

US\$225,000/total

Project title: 'Retrograde Wnt secretion at synapses'

Role: PI

TSA-99-2007

2009-12/31/2012

Tuberous Sclerosis Alliance

US\$150,000/total

Project title: 'Roles of TSC2 in Regulation of Dendritic Protein Synthesis and Synaptic Plasticity'

Role: PI

W81XWH-04-1-0261

2004-2008 US\$675,623/total

Department of Defense, Army Med Research & Material Command, USA

Project title: 'A functional genomic analysis of NF1-associated learning disabilities'

Role: PI

0330354N

2003-2006 US\$260,000/total

American Heart Association

Project title: 'Molecular mechanisms of synaptic protein synthesis'

Role: PI

2002-08-09-APL

2002-2006 US\$225,000/total

Whitehall Foundation

Project title: 'The role of dendritic RNA targeting in synaptic plasticity'

Role: PI

Research Scholar

2003-2005 CA\$300,000/total

The EJLB Foundation

Project title: 'Dendritic RNA targeting and synaptic plasticity'

Role: PI

COMMITTEE RESPONSIBILITIES:

International Grant Review:

US-Israel Binational Science Foundation (2007)
Alberta Heritage Foundation for Medical Research (Canada) (2007)
Marsden Fund (Royal Society of New Zealand) (2009)
UK Biotechnology and Biological Sciences Research Council (2011, declined)
UK Medical Research Council (MRC) (2012)
New Zealand Ministry of Science and Innovation (MSI) (2012)
Wellcome Trust/DBT India Alliance (2012)
UK Medical Research Council (MRC) (2014)

National Grant Review:

US Civilian Research and Development Foundation (2007)
National Science Foundation (NSF) (2009)
The Craig H. Neilsen Foundation (2010)
US Department of Defense (DOD) (2010)
US Department of Defense (DOD) (2011)
US Department of Defense (DOD) (2012, declined)
US NIH Study Section (invited to serve on a Special Emphasis Panel (SEP) in 2014;
Declined due to time conflict)
US NIH Study Section (invited to serve on the NAED Study Section as an ad hoc
member in 2014; Declined due to time conflict)
US NIH Study Section (a Special Emphasis Panel, SEP), May 27, 2016
US NIH NAED study section, ad hoc reviewer, November 18, 2016
NIH sponsored Nebraska Center for Substance Abuse Research (NCSAR): pilot grant,
September, 2017
US NIH Study Section [a Special Emphasis Panel, ZRG1 AARR-Q(51)], Nov. 29, 2017
US NIH Study section [a Special Emphasis Panel, ZRG1 AARR-Q(52)], March 14, 2019

Professional Committees:

Executive Committee Member, Gulf Coast Translational Pain Research Consortium,
Houston (2014 - present)
Board of Directors, Texas Pain Research Consortium, University of Texas (2015 -
present)

SERVICE AT UTMB

Service to the Neuroscience Graduate Program, Graduate School

2009-2014: Member of the Admission Committee

2014: Independent evaluator of Ph.D. qualifying exam

2014-2016: Director, the Neuroscience Graduate Program
2019: Independent evaluator of Ph.D. qualifying exam

Service to the Cell Biology Graduate Program, Graduate School

2010: Member of the Internal Review Committee
2012: Alternative member (from the Cell Biology Program) in the Curriculum Committee
2014 - present: Member of the Credential Committee

Service to the Department of Neuroscience and Cell Biology, Medical School

2009 Fall Retreat: Judge for Oral and Poster Presentations
2010 Fall Retreat: Coordinating Judge for Poster Presentations
2012 Summer Retreat: Session Chair for 'Signaling Mechanisms of Pain States'
2010-2013: Co-organizer for The Combined Anesthesiology and Neuroscience Conference
2013 – present: Chair on the Departmental Seminar Committee
2014 – present: Member on the Grant Review Committee
2014 – present: Member of the Microscope Committee
2014 – present: Member of the faculty search committee
2014 - present: Member of the Executive Committee
2014 - present: MRB floor leader
2017 – present: Member of the Appointment, Promotion and Tenure Committee
2019 – present: Member, Chair's Advisory Committee
2019: Chair, Organizing Committee of the Departmental Retreat
2019-2020: Chair, Internal Reviewing Committee for Departmental Review

Service to the Medical School

2014: Grant review committee member, FY2014 NeuroID Pilot Project Application
2014-2015: Member, Chair Search Committee, Department of Neuroscience and Cell Biology, UTMB Medical School

Service to the Graduate School

2009 – present: Interview PhD or MD/PhD student candidates
2014 – 2016: Member, School Executive Committee

Service to the UTMB Chinese Faculty Club

2012: Vice President/Treasurer
2013: President

Service to the UTMB

2017 – present: Grant Reviews and Oversight (GRO) Committee

COMMITTEE RESPONSIBILITY OTHER THAN UTMB: SERVICE TO THE SOCIETY OF NEUROIMMUNE PHARMACOLOGY

2012 – present: member, the Early Career Investigator Travel Awards Committee

COMMITTEE RESPONSIBILITY OTHER THAN UTMB: ADMINISTRATIVE SERVICE AT UC IRVINE

Service to the University

2005 UCI Ad Hoc Committee for Society for Neuroscience Travel Awards
2002 UCI Ad Hoc Committee for Burroughs Wellcome Fund Postdoctoral Travel Awards

Service to the School of Biological Sciences

2005-2007 Executive Committee of the School of Biological Sciences
2002-2007: School of Biological Sciences Library Committee
2002-2007: School of Biological Sciences Honor Committee

Service to the Department

2002-2005: Neurobiology Advisory Board
2006 NB&B Ad Hoc Academic Personnel Committee
2004 NB&B Ad Hoc Academic Personnel Committee
2004 Ad Hoc Committee for James McGaugh Award for Excellence in Graduate Research
2003 Ad Hoc Committee for the Roger W. Russell Scholar's Award, CNLM, UCI
2003 NB&B Ad Hoc Academic Personnel Committee
2002 NB&B Ad Hoc Academic Personnel Committee

Service to the Center for Neurobiology of Learning and Memory

2004-2006 Organizer for the CNLM Colloquium

SCIENTIFIC SESSIONS ORGANIZED: NONE

SCIENTIFIC SESSIONS CHAIRED/DISCUSSION LEADERS:

06/12 Session Chair for 'Signaling Mechanisms of Pain States', 2012 Summer Retreat, Department of Neuroscience and Cell Biology, UTMB, Galveston Convention Center, Galveston, TX

10/02 Session chair for the Annual Meeting of the Southern California Section of the Society of Chinese Bioscientist in America, Irvine, CA

11/01 Session co-chair for the Seventh International Conference on the Neurobiology of Learning and Memory, Irvine, CA.

TEACHING RESPONSIBILITIES

A. TEACHING RESPONSIBILITIES AT UTMB

a. Teaching

School of Medicine (SOM)

2016 Spring: Neuroscience and Human Behavior (PBL)
(full facilitator, 40 hours)

2015 Spring: Neuroscience and Human Behavior (PBL)

(full facilitator, 40 hours)
2014 Spring: Neuroscience and Human Behavior (PBL)
(full facilitator, 40 hours)
2013 Spring: Neuroscience and Human Behavior (PBL)
(Alternative facilitator, 2 hours)
2012 Spring: Neuroscience and Human Behavior (PBL)
(full facilitator, 46 hours)
2011 Spring: Neuroscience and Human Behavior (PBL)
(full facilitator, 48 hours)
2010 Spring: Neuroscience and Human Behavior (PBL)
(full facilitator, 48 hours)
2009 Spring: Neuroscience and Human Behavior (PBL)
(as a substitute for 20 hours)

Graduate School (GSBS)

2019 Fall: Synapse (2 hours of the course)
2018 Summer: Mechanisms of Drug Abuse and Chronic Pain
(Course Co-Director)
2018 Fall: Synapse (2 hours of the course)
2017 Summer: Mechanisms of Drug Abuse and Chronic Pain
(Course Co-Director)
2017 Fall: Synapse (2 hours of the course)
2016 Fall: Synapse (2 hours of the course)
2016 Summer: Mechanisms of Drug Abuse and Chronic Pain
(Course Co-Director)
2015 Fall: Synapse (2 hours of the course)
2014 Fall: Neural Development and Neurogenetics
(3 hours of the course)
2014 Spring/Summer: Advanced Cell Biology
(Course Director)
2013 Spring/Summer: Advanced Cell Biology
(Course Director)
2012 Fall: Integrative Neuroscience Course
(2 hours of the course)
2012 Fall: Neural Development and Neurogenetics
(3 hours of the course)
2012 Fall: Neurobiology of Diseases V
(2 hours of the course)
2012 Spring/Summer: Advanced Cell Biology
(Course Director)
2011 Fall: Neural Development and Neurogenetics
(3 hours of the course)
2011 Fall: Integrative Neuroscience Course
(2 hours of the course)
2011 Spring/Summer: Advanced Cell Biology
(Course Director)
2010 Fall: Integrative Neuroscience Course
(2 hours of the course)

2010 Fall: Neural Development and Neurogenetics
(3 hours of the course)
2010 Fall: Neurobiology of Diseases V
(2 hours of the course)
2010 Summer: Advanced Cell Biology
(Course Director)
2009 Summer: Neurobiology of Diseases V
(2 hours of the course)

b. Student/Mentees/Advisees/Trainees:

Post-doctoral fellows/scientists:

Guangzhen Hu, Ph.D. (2009-2010, UTMB)
Yuqiang Shi, Ph.D. (2010-, UTMB)
Subo Yuan, M.D., Ph.D. (2010- UTMB)
Im Ju Jeong, Ph.D. (2013-2014, UTMB)
Xin Liu, Ph.D. (2014 - UTMB)
Chilman Bae, Ph.D. (2015 – UTMB)
Junying Zheng, Ph.D. (2016- UTMB)
Paul Boakye, Ph.D. (2018- UTMB)

Visiting Scholars:

Jian-Hong Shu, Ph.D. (2011- 2012, UTMB; Now: Professor and
Assistant Dean, Zhejiang Sci-Tech University, China)
Yong-Mei Zhang, Ph.D. (2014-2015, UTMB; Now: Professor and
Vice Dean, Xuzhou Medical University, China)
Wenping Zhang, Ph.D. (2014-2015, UTMB; Now: Associate
Professor, Zhejiang Sci-Tech University, China)
Kaiwen Guo, Ph.D. (2015-2016, UTMB; Now: Professor and Chair,
Wuhan Science and Technology University, China)
Ying Zheng, MD (2016- UTMB)

Ph.D. Students:

Serena Clark (2010 rotation, UTMB)
Shayne Hassler (2010 rotation, UTMB)
Bei Li (co-supervisor 2009-2011, UTMB, a Ph.D. student from Sun
Yat-Sen University, China; Now: Associate Professor,
Hainan Provincial Institute for Drug Control, China)
Xiangling Yang (co-supervisor 2008-2010, a Ph.D. student in Sun
Yat-Sen University, China)
Wenjuan Ru (2013-2019, Dissertation Supervisor, Neuroscience
UTMB)
Bolong Liu (2014 – 2015), a student from the Sun Yat-Sen
University, China; Now: a physician and a researcher in the
3rd affiliated hospital of Sun Yat-Sen University, China)
Anita C. Randolph (2014, rotation, Neuroscience UTMB)
Jessica Di Re (2015, rotation, Neuroscience UTMB)
Keegan Bush (2016-present, Dissertation Co-supervisor,
Neuroscience UTMB)

Lanisha Patterson (2017, rotation, Neuroscience UTMB)
Michael Spurgat (2018 – present, Dissertation Supervisor, Human Pathophysiology and Translational Medicine, UTMB)
Zachary Watson (2019 – present, Dissertation Supervisor, Cell Biology, UTMB)

MD/Ph.D. Students:

Amanda Nguyen (2018, rotation, UTMB)

Master students:

Wenjuan Ru (co-supervisor 2008-2010, Sun Yat-Sen Univ. China)
Yichen Li (co-supervisor 2008-2011; Sun Yat-Sen Univ. China)
Xianzi Wan (co-supervisor 2008-2011; Sun Yat-Sen Univ. China)
Yanxi Peng (co-supervisor 2009-2012; Sun Yat-Sen Univ. China)
Catherine Childress (Research Thesis Supervisor, 2015-2016, UTMB School of Health Professionals)
Sarah Scaramuzzi (Research Thesis Supervisor, 2015-2016, UTMB School of Health Professionals)
Stevany Shamoon (Research Thesis Supervisor, 2016-present, UTMB School of Health Professionals)

Research Staff:

Wenjuan Ru, M.Sc. Research Fellow (2011- 2013)
Marti de Cabo Jaume, M. Sc. Research Fellow (2013-2014)

c. Chair/Member of Ph.D. Supervisory Committee for:

Wei Guo, UTMB (Neuroscience), 2011
Rosann M. Govea, UTMB (Neuroscience), 2013 –2015
Christopher Wild, UTMB (Pharmacology), 2014 – 2017
Kara Barber, UTMB (Neuroscience), 2016 – 2018
Wenjuan Ru, UTMB (Neuroscience), 2013-2019.
Jennifer Wang, UTMB (Infectious Diseases), 2016-present
Eric Wold, UTMB (Pharmacology), 2016-present
Kali Hankerd, UTMB (Neuroscience), 2018 – present
Edrous Alamer, UTMB (Microbio. & Immunology), 2018 – present
Daniela D'Amico, UTMB (Neuroscience), 2019-present

d. External Reviewer of Ph.D. dissertation of:

Youjun Yang, Nanchang University, China, 2015
Huifeng Jiao, Nanchang University, China, 2015

External Reviewer of Masters Thesis for:

Mingxing Geng (co-supervisor 2014-2016; Zhejiang Sci-Tech University, China)

B. TEACHING RESPONSIBILITIES AT THE UNIVERSITY OF CALIFORNIA, IRVINE

a. Teaching

Graduate courses:

2006 Fall: Molecular Neuroscience
2005 Fall: Molecular Neuroscience
2004 Fall: Molecular Neuroscience
2003 Fall: Molecular Neuroscience
2002 Fall: Molecular Neuroscience
2002 Spring: Molecular Neuroscience

Undergraduate courses:

2008 Winter: Neuroscience Fundamentals (N112)
2007 Spring: Molecules, Synapses and Memory (N190)
2007 Spring: Synapses (2B)
2007 Winter: Neuroscience Fundamentals (N112)
2006 Spring: Molecular Biology of the Synapse (N190)
2006 Spring: Synapses (2B)
2005 Winter: Neuroscience Fundamentals (156C)
2005 Spring: Synapses (2B)
2005 Spring: Neuroscience Fundamentals (156C)
2004 Spring: Synapses (2B)
2004 Spring: Neuroscience Fundamentals (156C)
2004 Winter: Molecular Biology of the Synapse (152)
2003 Spring: Neuroscience Fundamentals (156C)
2003 Spring: Synapses (2B)
2003 Spring: Neurobiology and Behavior (110 A and 110B)

b. Students/Mentees/Advisees/Trainees

Post-doctoral fellows:

Yan-Wei Huang, Ph.D. (2005-2007, UCI)
Ruomu Gong, M. D. Ph.D. (2002-2008, UCI)
Jianyong Chen, M. D. Ph. D. (2003-2006, UCI)
Alexandra Patmanidi, Ph. D. (2004, UCI)

Ph.D. degree students

Erica Smith (Ph. D. Student, Rotation, 2005, UCI)
Gary Philips (Ph.D. Student, Rotation, 2004, UCI)

Master's degree students

Heather Hughes (M. Sc., 2002-2003, UCI)
Julie Kim (M.Sc. student from UCI Biotechnology M. Sc. Program; 2003-2005, UCI)

Undergraduate degree students:

Chris Dan (2006-2007, UCI)
Gerberd Takhmazyan (2006-2008, UCI)
Daniel Tran, 2005 SURP Awardee (2003-2006, UCI)
Sholeh F. Rezvani (2004-2006)
Nima Rezaei Abbassi: 2003 SURP Awardee (2002-2004, UCI)

Christina Phan (2002-2003, UCI)

Research staff:

Xiaobin Liu, M. Sc. (2003-2005, UCI)

Chris Park, B. A. (2001-2006, UCI)

c. Chair/Member of Ph.D. Supervisory Committee for:

Esther M. Marquez-Lona (UCI)

Kate Reissner (UCI)

Bert Tseng (UCI)

Dan Berlau (UCI)

d. “External” Reviewer of Ph.D. dissertation of: None

“External” Reviewer of Diploma (~Master’s) dissertation of: None

FACULTY MENTORING

Yogesh Wairkar (2016 - 2019, PhD, Assistant professor; Neurology, UTMB; Awarded with one R56 and potential one R21/pending final decision)

Rakez Kayed (2014 - 2016, PhD, Associate Professor, Neurology, UTMB, One R01 grant awarded)

Qingjie Li (2015 – 2017, PhD, Assistant Professor, Internal Medicine, UTMB, One R21 grant awarded)

Yu Shin Kim (2015- 2019, Ph.D. Assistant Professor, NCB, UTMB, One R01 grant awarded)

Bin Gong (2016- . MD/PhD, Associate Professor, Pathology, UTMB, One R01 and one R21 awarded)

Jun-Ho La (2019- , Ph.D., Assistant Professor, NCB, UTMB)

Qing Yang (2019- , MD., Assistant Professor, NCB, UTMB)

Bo Chen (2019- , Ph.D., Assistant Professor, NCB, UTMB)

MEMBERSHIP IN SCIENTIFIC SOCIETIES/PROFESSIONAL ORGANIZATIONS:

Society for Neuroscience (1998 – present)

Association for the Study of Neurons and Diseases (2011 – present)

Society for NeuroImmune Pharmacology (2012 - present)

International Society of Neurovirology (2012 - present)

American Association for the Advancement of Science (2013 - present)

American Pain Society (2015-present)

International Association for the Study of Pain (2016-present)

ACADEMIC HONORS AND AWARDS

2019- Member, The Global Task Force on HIV-associated neuropathic pain

2018- Cecil H. and Ida M. Green Distinguished Chair in Neuroscience and Cell Biology

2016 Keynote Speaker, The 5th World Congress of Neurology and

	Therapeutics, March 14 th -16 th , 2016 London, England
2015	Invited Co-Guest Editor for a thematic issue of NEURAL PLASTICITY on Neural Malplasticity and Neuropathic Pain
2014-2018	William Willis Jr. MD, PhD Professorship in Neuroscience, University of Texas Medical Branch
2014	Invited Guest Editor for a thematic issue of CNS & NEUROLOGICAL DISORDERS-DRUG TARGETS on Wnt signaling in CNS disorders (2014).
2004-2007	New Investigator Award, The Department of Defense, USA
2003-2005	International Research Scholar, The EJLB Foundation, Canada
2003-2006	Developing Scientist Award, The American Heart Association, USA
2003	Award for the Faculty Desktop Computing Initiative Program, UC Irvine
1998-2001	HHMI Postdoctoral Associate, HHMI/Caltech
1995-1997	University of Toronto Open Doctoral Fellowship, University of Toronto
1995-1997	Restracom Doctoral Fellowship, The Hospital for Sick Children, Toronto
1991-1992	Counaught Graduate Fellowship, University of Toronto

EDITOR/SERVICE ON EDITORIAL BOARDS:

Academic Editor: PLoS ONE (2012 - present)

Guest Editor: A special issue of CNS & NEUROLOGICAL DISORDERS-DRUG TARGETS on Wnt signaling in CNS disorders (2014).

Co-Guest Editor: A special issue of NEURAL PLASTICITY on 'Maladaptive Plasticity and Neuropathic Pain' (2015)

JOURNAL REVIEW (Ad hoc)

Brain, Behavior, and Immunity
 Cerebral Cortex
 Eur J. Neuroscience
 Eur J. Pain
 FASEB Journal
 Future Virology
 Gene
 Hippocampus
 International J. Neuropsychopharmacology
 International J. Neuroscience
 Journal of Neurochemistry
 Journal of Neuroscience
 Journal of Neuroinflammation
 Journal of Neuroimmune Pharmacology
 Marine Drugs
 Molecular and Cellular Neuroscience
 Molecular Pain
 Nature Review Neuroscience
 Neuron
 Neurobiology of Learning and Memory
 Neuroscience

Neuroscience Bulletin
Neuroscience Letters
NeuroSignals
Pain
PLoS One
Scientific Reports
Synapses

GRANT REVIEW

US-Israel Binational Science Foundation (2007)
US Civilian Research and Development Foundation (2007)
Alberta Heritage Foundation for Medical Research (Canada) (2007)
Marsden Fund (Royal Society of New Zealand) (2009)
National Science Foundation (NSF, USA) (2009)
The Craig H. Neilsen Foundation (2010)
US Department of Defense (DOD, the NF program) (2010)
UK Biotechnology and Biological Sciences Research Council (2011, declined)
US Department of Defense (DOD, the NF program) (2011)
UK Medical Research Council (MRC) (2012)
New Zealand Ministry of Science and Innovation (MSI) (2012)
Alzheimer's Research UK (2012, declined)
The Netherlands Organization for Scientific Research (2012, declined)
US Department of Defense (DOD, the TSC program; 2012, declined)
Wellcome Trust/DBT India Alliance (2012)
UK Medical Research Council (MRC) (2014)
NIH NAED study section, ad hoc reviewer (2014, declined)
NIH Study Section (a Special Emphasis Panel, SEP), May 27, 2016
NIH NAED study section, ad hoc reviewer, November 18, 2016
NIH sponsored Nebraska Center for Substance Abuse Research (NCSAR): pilot grant, September, 2017
NIH Study Section [a Special Emphasis Panel, ZRG1 AARR-Q(51)], Nov. 29, 2017
NIH Study Section [a Special Emphasis Panel, ZRG1 AARR-J(42)], March 14, 2019

PUBLICATIONS

A. ARTICLES IN PEER-REVIEWED JOURNALS

a. PUBLISHED

1. Raju, K., Tang, S. J., Dube, I. D., Kamel-Reid, S., Bruce, D. M., and Breitman, M. L. (1993). Characterization and developmental expression of *Tlx-1*, the murine homolog of *HOX11*. ***Mechanism of Development***, 44:51-64.
2. Liu, Q., Shalaby, F., Puri, M., Tang, S. J., and Breitman, M. L. (1994). Novel zinc finger proteins that interact with the mouse rF-crystalline promoter and expressed in the sclerotome during early somitogenesis. ***Dev. Biol.*** 165:165-177.
3. Wen, X.-Y., Tang, S. J., and Breitman, M. L. (1994). Genetic mapping of two mouse homeobox genes *Tlx-1* and *Tlx-2* to murine chromosome 19 and 6. ***Genomics*** 24:388-390.
4. Tang, S. J.* and Breitman, M. L. (1995). The optimal binding sequence of HOX11 protein contains a predicted recognition motif. ***Nucleic Acid Research*** 23:1928-1935. *, corresponding author.
5. Macias-Silva, M., Hoodless, P. A., Tang, S. J., Buchwald, M., and Wrana, J. L. (1998). Specific activation of Smad 1 signaling pathways by the BMP7 type I receptor, ALK2. ***J. Biol. Chem.*** 273:25628-36.
6. Tang, S. J., Suen, T. C., McInnes, R. R., and Buchwald, M. (1998). Association of the TLX-2 homeodomain and 14-3-3 η signaling proteins. ***J. Biol. Chem.*** 273:25356-63.
7. Tang, S. J., Hoodless, P. A., Lu, Z., Breitman, M. L., McInnes, R. R., Wrana, J. L., and Buchwald, M. (1998). The *Tlx-2* homeobox gene is a downstream target of BMP signaling and is required for mouse mesoderm development. ***Development*** 125:1877-87.
8. Tang, S. J., Meulemans, D., Vazquez, L., and Schuman, E. M. (2001). A role for a rat homolog of stauferin in the transport of RNAs to neuronal dendrites. ***Neuron*** 32, 463-475.
9. Tang, S. J., Reis, G., Kang, H., Gingras, A. C. Sonenberg, N. and Schuman, E. M. (2002). A Rapamycin-Sensitive Signaling Pathway contributes to long-term synaptic plasticity in the hippocampus. ***Proc. Natl. Acad. Sci. USA*** 99, 467-472.
 - *Commentary in Faculty of 1000 (DOI: 10.3410/f.1004068.46654)*
 - *Highlighted by Editor's Choice in Science (252, 587, 2002)*
 - *Commentary in Trends Neurosci. (25, 180, 2002)*
10. Tang, S.- J. and Schuman, E. M. (2002). Protein Synthesis in the Dendrites. ***Phil. Trans. R. Soc. Lond. B*** 357, 521-529.
11. Gong, R. and Tang, S.-J.* (2006). Mitogen-activated protein kinase signaling is essential for activity -dependent dendritic protein synthesis. ***Neuroreport*** 17: 1575-1578. *, corresponding author.

12. Park, C. S., Gong, R., Stuart, J. and Tang, S.-J.* (2006). Molecular network and chromosomal clustering of genes involved in synaptic plasticity in the hippocampus. **J. Biol. Chem.** 281: 30195-30211. *, corresponding author.
- *Commentary in Faculty of 1000 (DOI: 10.3410/f.1033806.388976)*
 - *A text book published by the Oxford University Press (Introduction to Genomics, Ed. A. Lesk, 2007) exemplified this study with a designated section (p287-291)].*
13. Gong, R., Park, C. S., Abbassi, N. R. and Tang, S.-J.* (2006). Roles of glutamate receptors and the mTOR signaling pathway in activity-dependent dendritic protein synthesis in hippocampal neurons. **J Biol. Chem.** 281: 18802-18815. *, corresponding author.
14. Chen, J., Park, C. S. and Tang, S.-J. (2006). Activity-dependent synaptic WNT release regulates hippocampal long-term potentiation. **J. Biol. Chem.** 281: 11910-11916. *, corresponding author.
- *Comments in an authoritative review in the Trends Neurosci. (30:268-275): “(This work) provided the first evidence for activity-dependent Wnt secretion.”; “The release of Wnts in an activity-dependent manner raises the exciting possibility that some of the activity-dependent modifications of neuronal circuits might result from Wnt signaling.”*
 - *Highlighted in the Reference of an authoritative review in the Nat Rev Neurosci. 2010 Feb;11(2):77-86.*
15. Tran, D. H., Gong, R. and Tang, S.-J.* (2007). Differential roles of NR2A and NR2B subtypes in NMDA receptor-dependent protein synthesis in dendrites. **Neuropharmacology** 53: 252-256. *, corresponding author.
16. Tang, S.-J.* (2007). The synaptic Wnt signaling hypothesis. **Synapse** 61: 866-868. *, corresponding author.
17. Park C. S., Tang S.-J.* (2008). Regulation of microRNA Expression by Induction of Bidirectional Synaptic Plasticity. **J Mol. Neurosci.** 38, 50-56. *, corresponding author.
18. Zhou J, Li L, Tang S, Cao X, Li Z, Li W, Li C, Zhang X. (2008). Effects of serotonin depletion on the hippocampal GR/MR and BDNF expression during the stress adaptation. **Behav. Brain Res.** 195:129-38.
19. Park, C.S., Zhong, L., Tang, S.-J.* (2009). Aberrant expression of synaptic plasticity-related genes in the NF1+/- hippocampus. **J. Neurosci. Res.** 87, 3107-3119. *, corresponding author.
20. Tang, S.-J. * (2011). Chromatin Organization by Repetitive Elements (CORE): A Genomic Principle for the Higher-Order Structure of Chromosomes. **Genes** 2, 502-515. *, corresponding author.

21. Li, B., Zhong, L., Yang, X., Andersson, T., Huang, M., Tang, S.-J.* (2011) WNT5A Signaling Contributes to A β -Induced Neuroinflammation and Neurotoxicity. ***PLoS ONE*** 6(8): e22920. doi:10.1371/journal.pone.0022920. *, corresponding author.
22. Tang, S.-J.* (2011). A Model of DNA Repeat-Assembled Mitotic Chromosomal Skeleton. ***Genes*** 2, 661-670. *, corresponding author.
23. Li, Y., Li, B., Wan, X., Zhang, W., Zhong, L.*, Tang S.-J.* (2012) NMDA Receptor Activation Stimulates Transcription-Independent Wnt5a Protein Synthesis via the MAPK Signaling Pathway. ***Molecular Brain*** 5:1. *, corresponding author.
24. Wan, X., Li, B., Li, Y., Yang, X., Zhang, W., Zhong, L.*, Tang, S.-J.* (2012) Activation of NMDA Receptors Up-Regulates ADAM10 via a Wnt/MAPK Signaling Pathway. ***J. Neurosci.*** 32:3910-6. *, corresponding author.
25. Ru, W., Peng, Y., Zhong, L.*, Tang, S.-J.* (2012) A role of the mammalian target of rapamycin (mTOR) in glutamate-induced down-regulation of Tuberous Sclerosis Complex Proteins 2 (TSC2). ***J. Molecular Neurosci.*** 47:340-345. *, corresponding author.
26. Shi, Y., Gelman, B. B., Lisinicchia, J. G., Tang, S.-J.* (2012) Chronic-pain-associated astrocyte activation in the spinal cord dorsal horn of HIV-infected patients. ***J. Neurosci.*** 32:10833-40. *, corresponding author.
 - *Featured by an editorial commentary*
27. Shi, Y., Yuan S., Li, B., Wang, J., Carlton, S. M., Chung, K., Chung, J.-M., Tang, S.-J.* (2012) Regulation of Wnt Signaling by Nociceptive Input in Animal Models. ***Molecular Pain*** 8(1):47. *, corresponding author.
 - *Highly accessed article*
28. Yuan, S., Shi, Y., Tang, S.-J.* (2012) Wnt signaling in the pathogenesis of multiple sclerosis-associated chronic pain. ***J Neuroimmune Pharmacology*** 7, 904-913. *, corresponding author.
29. Tang, S.-J. * (2012) A Model of Repetitive-DNA-Organized Chromatin Network of Interphase Chromosomes. ***Genes*** 3, 167-175. *, corresponding author.
30. Li, B., Shi, Y., Shu, J., Gelman, B. B., Lisinicchia, J. G., Tang, S.-J.* (2013) Wingless-type Mammary Tumor Virus Integration Site Family, Member 5A (Wnt5a) Regulates Human Immunodeficiency Virus Type 1 (HIV-1) Envelope Glycoprotein 120 (gp120)-induced Expression of Pro-Inflammatory Cytokines via the Ca²⁺/Calmodulin-dependent Protein Kinase II (CaMKII) and c-Jun N-terminal

Kinase (JNK) Signaling Pathways. **J Biol Chem.** 288, 13610-19. *, corresponding author.

31. Shi, Y., Shu, J., Gelman, B. B., Lisinicchia, J. G., Tang, S.-J. * (2013) Wnt signaling in the pathogenesis of human HIV-associated pain syndromes. **J Neuroimmune Pharmacology** 8, 956-964. *, corresponding author.
 - *Editor's pick in Pain Research Forum*
 - *News in Pain Research Forum (06/28/2013)*
32. Saxena, V., Xie, G., Li, B., Farris, T., Welte, T., Gong, B., Boor, P., Wu, P., Tang, S.-J., Tesh, R., Wang, T. (2013) A hamster-derived West Nile virus isolate induces persistent renal infection in mice. **PLoS Negl Trop Dis.** 7(6):e2275.
33. Yuan, S., Shi, Y., Chen, J., Zhou, X., Li, G., Gelman, B., Lisinicchia, J., Carlton, S., Ferguson, M., Tan, A., Sarna, S., Tang, S.-J. * (2014) gp120 in the pathogenesis of human HIV-associated pain. **Annals of Neurology**, 75, 837-50. *, corresponding author.
 - *Editor's pick in Pain Research Forum*
34. Tang, S.- J*. (2014) Synaptic activity-regulated Wnt signaling in synaptic plasticity, glial function and chronic pain. **CNS and Neurological Disorders - Drug Targets** 13, 737-44. *, corresponding author
35. Yuan SB, Ji G, Li B, Andersson T, Neugebauer V, Tang S.-J. * (2015) A Wnt5a signaling pathway in the pathogenesis of HIV-1 gp120-induced pain. **Pain**, 156, 1311-9. *, corresponding author.
36. Ru, W., Tang, S.-J. * (2016) HIV-1 gp120 down-regulating phosphorylated NMDA receptor subunit 1 requires synaptic activation and CXCR4. **J Neuroimmune Pharmacology** 11, 182-191. *, corresponding author.
37. Shi, Y., Shu, J., Yuan, S., Tang, S.-J. * (2016) Pathogenic role of myelination dysregulation in HIV-associated pain. **Molecular Pain** pii: 1744806916656845. *, corresponding author.
38. Tang, S. -J. * (2016) The R-operon: a model of repetitive DNA-organized transcriptional compartmentation of eukaryotic chromosomes for coordinated gene expression. **Genes** 7(4). pii: E16. *, corresponding author.
39. Tang, S. -J. * (2016) A Repetitive DNA-Directed Program of Chromosome Packaging during Mitosis. **J Genet. & Genomics** 43(8):471-6. *, corresponding author.
40. Liu, B., Su, M., Tang, S. -J., Zhou, X., Zhan, H., Yang, F., Li, W., Li, T., Xie, J. (2016) Spinal astrocytic activation contributes to mechanical allodynia in a rat model of cyclophosphamide-induced cystitis. **Molecular Pain** 12. pii: 1744806916674479.

41. Liu, B., Liu, X., Tang, S.-J*. (2016) Interactions of Opioids and HIV Infection in the Pathogenesis of Chronic Pain. **Frontiers in Microbiology** 7, 103. *, corresponding author.
42. Tang, S.-J.* (2017) New evidence for the theory of chromosome organization by repetitive elements (CORE). **Genes** 8(2). pii: E81. doi: 10.3390/genes8020081.. *, corresponding author.
43. Wu, T., Zhang, J., Geng, M., Tang, S.-J., Zhang, W.*, Shu, J.* (2017) Nucleoside reverse transcriptase inhibitors (NRTIs) induce proinflammatory cytokines in the CNS via Wnt5a signaling. **Scientific Reports** 7(1):4117. doi: 10.1038/s41598-017-03446-w. *, corresponding author.
44. Wang, Y., Liao, J., Tang, S.-J., Shu, J., Zhang, W. (2017) HIV-1 gp120 Upregulates Brain-Derived Neurotrophic Factor (BDNF) Expression in BV2 Cells via the Wnt/ β -Catenin Signaling Pathway. **J Mol Neurosci.** 62(2):199-208.
45. Ru, W., Tang, S.-J.* (2017) HIV-associated synaptic degeneration. **Mol Brain.** 10(1):40. doi: 10.1186/s13041-017-0321-z. *, corresponding author.
46. Tang, S.-J.* (2017) Potential role of the phase separation of repetitive DNA in chromosomal organization. **Genes** 8 (10):pii: E279. doi: 10.3390/genes8100279.
47. Yuan, S., Shi, Y., Guo, K., Tang, S.-J.* (2018) Nucleoside reverse transcriptase inhibitors (NRTIs) induce pathological pain through Wnt5a-mediated neuroinflammation in aging mice. **J Neuroimmune Pharmacology** 13(2):230-236. *, corresponding author.
48. Yang, Y., Liu, X., Wu, T., Liu, X., Zhang, W., Shu, J.*, He, Y*, Tang, S.-J. (2018) Quercetin attenuates AZT-induced neuroinflammation in the CNS via Wnt5a signaling. **Scientific Reports** 8(1):6194. doi: 10.1038/s41598-018-24618-2. *, corresponding author
49. Zhang, W., Shi, Y., Peng, Y., Zhong, L., Zhu, S., Zhang, W., Tang, S.-J.* (2018) Neuron activity-induced Wnt signaling up-regulates expression of brain-derived neurotrophic factor in the pain neural circuit. **J Biol Chem.** 293(40):15641-15651. *, corresponding author.
50. Bae, C., Wang, J., Shim, H. S., Tang, S.-J., Chung, J. M., La, J. H.* (2018) Mitochondrial superoxide increases excitatory synaptic strength in spinal dorsal horn neurons of neuropathic mice. **Mol Pain.** 14:1744806918797032. doi: 10.1177/1744806918797032. *, corresponding author
51. Luo, H., Winkelmann, E. R., Zhu, S., Ru, W., Mays, E., Silvas, J. A., Vollmer, L. L., Gao, J., Peng, B. H., Bopp, N. E., Cromer, C., Shan, C., Xie, G., Li, G., Tesh, R., Popov, V. L., Shi, P. Y., Sun, S.C., Wu, P., Klein, R. S., Tang, S.-J., Zhang, W., Aguilar, P. V., Wang, T*. (2018) Peli1 facilitates virus replication and

promotes neuroinflammation during West Nile virus infection. **J Clin Invest.** 128(11):4980-4991. *, corresponding author

52. He, X., Drelich, A., Yu, S., Chang, Q., Gong, D., Zhou, Y., Qu, Y., Yuan, Y., Su, Z., Qiu, Y., Tang, S.-J. Gaitas, A., Ksiazek, T., Xu, Z., Zhou, J., Feng, Z., Wakamiya, M., Lu, F., Gong, B.* (2019) Exchange protein directly activated by cAMP plays a critical role in regulation of vascular fibrinolysis. **Life Sci.** 221:1-12. *, corresponding author

53. Shi, Y., Yuan, S., Tang, S.-J.* (2019) Morphine and HIV-1 gp120 cooperatively promote pathogenesis in the spinal pain neural circuit. **Mol Pain** 2019 Jan-Dec;15:1744806919868380; Epub ahead of print; *, corresponding author.

54. Ru, W., Liu, X., Bae, C., Shi, Y., Walikonis, R., Chung, J. M., Tang, S.-J.* (2019) Microglia mediate HIV-1 gp120-induced synaptic degeneration in spinal pain neural circuits. **J Neurosci.** 2019 Aug 30. pii: 2851-18. Epub ahead of print; *, corresponding author.

- *Editor's pick in Pain Research Forum*

55. Bush, K., Barber, K., Martinez, J., Tang, S.-J.* and Wairkar, Y*. (2019) Stabilizing dendrites protects against antiretroviral drug-induced neuropathy in a Drosophila Model. (Submitted; *, co-corresponding authors)

56. Shi, Y., Tang, S.-J.* (2019) Reactive oxygen species (ROS) is critical for morphine exacerbation of HIV-1 gp120-induced pain. (Submitted; *, co-corresponding author)

57. Shi, Y., Tang, S.-J.* (2019) Syt 4 switches Wnt secretion to the activity-regulated pathway by regulating SNARE assembling. (submitted; *, corresponding author)

58. Liu, X., Liu, B., Tang, S.-J.* (2019) Differential roles of microglia and astrocytes in opioid-induced hyperalgesia (Submitted; *, co-corresponding author)

59. Tang, S.-J.* (2019) Patterning topologically associating domains along chromosomes: a potential role of repetitive DNA sequences. (Submitted; *, co-corresponding author)

60. Shi Y., Yuan, S., Tang, S.-J.* (2019) Reactive oxygen species (ROS) are critical for morphine exacerbation of HIV-1 gp120-induced pain. (Submitted; *, co-corresponding author)

b. MANUSCRIPTS IN PREPARATION

1. Liu, X., Liu, B., Zhang, Y., Zhou, X., Tang, S.-J. (2019) Wnt5a from neurons stimulates astrocytes in the spinal cord dorsal horn to induce opioid-induced hyperalgesia. (in preparation).

2. Yuan, S., Tang, S.-J. (2019) Wnt signaling in HIV-associated painful sensory neuropathy: distinct roles in nociceptor degeneration and sprouting. (in preparation)
3. Shi, Y., Tang, S.-J. (2019) Peripheral painful stimulation evokes spinal NG2 cells proliferation via neuron-NG2 synapses. (in preparation)
4. Liu, X., Tang, S.-J. (2019) HIV-1 gp120 induces spinal neuroinflammation via an inflammasome-independent pathway. (in preparation)

B. INVITED REVIEW ARTICLES

1. Tang, S.-J. and Schuman, E. M. (2002). Protein Synthesis in the Dendrites. ***Phil. Trans. R. Soc. Lond. B*** 357, 521-529.
2. Tang, S.-J.* (2014) Synaptic activity-regulated Wnt signaling in synaptic plasticity, glial function and chronic pain. ***CNS and Neurological Disorders - Drug Targets*** 13, 737-44. *, corresponding author
3. Liu, B., Liu, X., Tang, S.-J.* (2016) Interactions of Opioids and HIV Infection in the Pathogenesis of Chronic Pain. ***Frontiers in Microbiology*** 7, 103. *, corresponding author.
4. Ru, W., Tang, S.-J.* (2017) HIV-associated synaptic degeneration. ***Mol Brain***. 10(1):40. doi: 10.1186/s13041-017-0321-z. *, corresponding author.

C. EDITORIALS

1. Tang, S.-J.* (2014) W(e)nt to the brain: Wnt signaling in neurological disorders. ***CNS and Neurological Disorders - Drug Targets*** 13, 736. *, corresponding author.
2. Xiang-Yao Li, You Wan, Shao-Jun Tang, Yun Guan, Feng Wei, Daqing Ma (2015) Maladaptive Plasticity and Neuropathic Pain. ***Neural Plasticity*** (in press)

D. LETTERS/COMMENTARYS

1. Tang, S.-J. (2014) An online commentary in *Science* on “Dosage Compensation via Transposable Element Mediated Rewiring of a Regulatory Network” (15 November 2013, p. 846)

(<http://comments.sciencemag.org/content/10.1126/science.1239552#comments>)

E. OTHER: Thesis/Dissertation

1. Tang, S.-J. (1994) Studies on the DNA Binding Activity of the HOX11 Protein. Thesis for the Degree of Master of Science from the University of Toronto, Graduate Department of Molecular and Medical Genetics.
Supervisor: Dr. Martin Breitman
2. Tang, S.-J. (1998) Functional Analysis of the Homeobox Gene Tlx-2 during Mouse Embryogenesis. Thesis for the Degree of Doctor of Philosophy from the University of Toronto, Graduate Department of Molecular and Medical Genetics.
Supervisor: Dr. Manuel Buchwald; Co-supervisor: Dr. Roderick McInnes

F. ABSTRACTS

1. Tang, S.-J., Wu, X., and Liu, L. S. (1989). Studies on the molecular biology of the wide compatibility gene of rice. *The Second Chinese Meeting of The Rockefeller Foundation's International Program on Rice Biotechnology*, Beijing, China.
2. Tang, S.-J., Li W., Bai, C., and Liu, L. S. (1990). Establishment of an experimental system for tagging the wide compatibility gene of rice. The Fourth Annual Meeting of the Rockefeller Foundation's International Program on Rice Biotechnology, Arizona, USA.
3. Tang, S.-J., Breitman, M. L., McInnes, R. R., and Buchwald, M. (1995). The homeobox gene Tlx-2 is specifically expressed in the peripheral nervous system and essential for the embryogenesis. Mouse Molecular Genetics Conference, EMBL, Heidelberg.
4. Hoodless, P. A., Tang, S.-J., Kim, S. McInnes, R. Buchwald, M., Wrana, J. L. (1997). MAD-related (MADR) proteins and BMP signaling in early development. In: Pattern formation during development. LXII Cold Spring Harbor Symposium, Quantitative Biology. Cold Spring Harbor, NY.
5. Tang, S.-J., Smith, W. B., and Schuman, E. M. (1998). A potential role of the rapamycin-sensitive signaling in neural plasticity. Gordon Conference: Cell Biology of the Neuron. NH.
6. Tang, S.-J., Smith, W. B., and Schuman, E. M. (1998) Identification of a translational signaling pathway at synaptic sites in the hippocampus. 28th Annual Meeting of the Society for Neuroscience. Los Angeles, CA.
7. Tang, S.-J., Meulemans, D., Vazquez, L., and Schuman, E. M. (1999). The role

of a rat Staufen-like protein in dendritic RNA targeting of hippocampal neurons. 29th Annual Meeting of Society for Neurosciences. Miami Beach, FL.

8. Gong, R. and Tang, S.-J. (2004). Regulation of dendritic protein synthesis. 34th Annual Meeting of Society for Neurosciences. San Diego, CA.
9. Gong, R. and Tang, S.-J. (2005). Mechanisms of activity-regulated protein synthesis in dendrites. International Conference on Synapses and Synaptic Plasticity. July 21-23, 2005. University of British Columbia, Vancouver, Canada.
10. J. Chen, Park, C. S. and Tang, S.-J. (2006). Wnt signaling in synaptic plasticity. Keystone Symposia. April 7-12, 2006. Snowbird, Utah.
11. Tang, S.-J. (2006). Regulation of Activity-Dependent Protein Synthesis in Dendrites. International Conference on Synapse, Memory, Drug Addiction and Pain. August 21-23, 2006. Toronto, Canada
12. Gong, R. and Tang, S.-J. (2006). Role of glutamate receptors and mTOR signaling in activity-dependent protein synthesis in dendrites. Annual Meeting of American Heart Association. November 12-15, 2006. Chicago, IL.
13. Huang, Y. and Tang, S.-J. (2007). Activity-dependent secretion of Wnt3A from hippocampal neurons. 37th Annual Meeting of Society for Neurosciences. San Diego, CA.
14. Tang, S.-J. (2011) Activity-regulated Wnt signaling. The 6th International Conference of Neurons and Diseases. August 3-5, 2011. Toyama, Japan.
15. Shi, Y., Li, B. and Tang, S.-J. (2011) Wnt signaling in chronic pain. Annual Meeting of Society for Neurosciences. November 12-16, 2011. Washington D. C.
16. Tang, S.-J., Gelman, B., Shi, Y. and Li B. (2012) Wnt signaling in NeuroAIDS. The 18th Conference of the Society of NeuroImmune Pharmacology. April 25-28, 2012. Hawaii, USA.
17. Tang, S.-J. (2012) Wnt signaling and HIV-associated chronic pain. The 11th International Symposium on NeuroVirology (jointly held with 2012 Conference on HIV in the Nervous System). May 29-June 2, 2012. New York, USA.
18. Shi, Y., Yuan, S., Gelman, B., Lisinicchia, J., and Tang, S.-J. (2013) Astrocyte Activation in the Spinal Cord Dorsal Horn of HIV Patients with Pathological Pain. Gordon Research Conference: Glial Biology: Functional Interactions among Glia & Neurons. March 3-8, 2013, Ventura, CA
19. Shi, Y., Yuan, S., Gelman, B., Lisinicchia, J., and Tang, S.-J. (2013) Interplay of gp120 and opiates during the pathogenesis of HIV-associated chronic pain. The

19th Conference of the Society of NeuroImmune Pharmacology. April 2-7, 2013, San Juan, Puerto Rico

20. Shi, Y., Yuan, S., Li, B., Gelman, B. and Tang, S.-J. (2013) Pathogenic Mechanisms of HIV-1/AIDS-Associated Chronic Pain. The 12th International Symposium on NeuroVirology (jointly held with 2013 Conference on HIV in the Nervous System). Oct 29-Nov 2, 2013. Washington DC, USA
21. Ru, W., Tang, S.-J., Shi, Y. and Yuan, S. (2013) Glutamate receptors, cxcr4 and Wnt signaling are involved in HIV-1 gp120 Bal-induced synapse loss. Annual Meeting of Society for Neurosciences. November 9-13, 2013, San Diego, USA
22. Yuan, S., Tang, S.-J., Chen, J., Gelman, B. and Sarna, S. (2013) Mice with perispinal injection of HIV gp120Bal develop extensive pain-related pathologies similar to that observed in the HIV-1-infected patients who developed chronic pain. Annual Meeting of Society for Neurosciences. November 9-13, 2013, San Diego, USA
23. Tang, S.-J., Yuan, S., Shi, Y., Li, B., Ji, G., Gelman, B., Neugebauer, V. (2014) HIV-1/AIDS-Associated Neuropathic Pain: The Pathogenic Contribution of the gp120-Wnt-JNK-cytokine Cascade. The 20th Conference of the Society of NeuroImmune Pharmacology. March 26-29, 2014, New Orleans, USA
24. Tang, S.-J. (2014) Repetitive DNA in chromosomal packaging. March 9-14, 2012, Keystone Symposia Conference: Mobile Genetic Elements and Genome Evolution. Santa Fe, New Mexico, USA
25. Yuan, S., Li, B., Ji, G., Neugebauer, V., Tang, S.-J. (2014) Wnt5a signaling in the pathogenesis of HIV-associated pain. Gulf Coast Consortium for Translational Pain Research: 5th Annual Symposium. April 4, 2014, Houston, Texas, USA
26. Zhang, Y.M., Shi, Y., Li, B., Ru, W., Tang, S.-J. (2014) Mechanism of astrocyte activation during the pathogenesis of HIV-associated pain. Annual Meeting of Society for Neurosciences. November 15-19, 2013, Washington DC, USA
27. Ru, W., Tang, S.-J. (2014) Microglia contribute to HIV-1 gp120-induced synapse loss. Annual Meeting of Society for Neurosciences. November 15-19, 2013, Washington DC, USA
28. Yuan, S., Li, B., Ji, G., Neugebauer, V., Tang, S.-J. (2014) Wnt5a signaling pathway in the pathogenesis of HIV-associated pain. Annual Meeting of Society for Neurosciences. November 15-19, 2013, Washington DC, USA
29. Shi, Y., Yuan, S., Tang, S.-J. (2015) Pathogenic interaction between HIV-1 and opiates in HIV-associated chronic pain. International Conference on Global Health: Prevention and Treatment of Substance Abuse Disorders and HIV. April 22-24, 2015, Hangzhou China

30. Yuan, S., Tang, S.-J. (2015) Mechanisms of HIV-associated sensory neuropathy: role of Wnt signaling. 13th International Symposia on Neurovirology. June 2-6, 2015, San Diego, USA
31. Shi, Y., Tang, S.-J. (2015) Pain-induced spinal NG2 cell proliferation: a critical role of β -catenin in neurons but not in NG2 cells. 2015 Neuroscience Research Conference: Advancing Pain Neuroscience Discovery Toward Therapeutics. August 4-6, 2015, Dallas, USA
32. Ru, W., Yuan, S., Shi, Y., Tang, S.-J. (2015) Microglia Contribute to HIV1-gp120-induced synapse loss. 2015 Neuroscience Research Conference: Advancing Pain Neuroscience Discovery Toward Therapeutics. August 4-6, 2015, Dallas, USA
33. Yuan, S., Ru, W., M. De Cabo Jaume, Tang, S.-J. (2015) HIV-Associated Pain and Peripheral Sensory Neuropathy: the Role of Wnt5a Signaling. Annual Meeting of Society for Neurosciences. October 17-21, 2015, Washington DC, USA
34. Tang, S.-J., Liu, X., Yuan, S., Shi, Y. (2016) Neuron-astrocyte interaction in the pathogenesis of HIV-1/AIDS-Associated Neuropathic Pain. The 22th Conference of the Society of NeuroImmune Pharmacology. April 6-9, 2016, Krakow, Poland
35. Tang, S.-J. (2016) 'Junk DNA' in Chromosome Packaging: The CORE Theory. The 2016 International Congress on Transposable Elements. April 16-19, St. Malo, France
36. Ru, W., Tang, S.-J. (2016) Microglia activation contributes to HIV-1-gp120 induced synapse degeneration. Annual Meeting of Society for Neurosciences. Nov 12-16, 2018, San Diego, USA
37. Shi, Y., Tang, S.-J. (2016). Pain-induced spinal NG2 cell proliferation: a critical role of β -catenin in neurons but not in NG2 cells. Annual Meeting of Society for Neurosciences. Nov 12-16, 2018, San Diego, USA
38. Ru, W., Tang, S.-J. (2017) The activation of glial cells contributes to HIV-1-gp120- induce synapse degeneration. Annual Meeting of Society for Neurosciences. Nov 11-15, 2017, Washington DC, USA
39. C. Bae, C., La, J., Shim, H., Tang, S.-J., Chung, J. M. (2017) Decrease in excitatory synaptic response of spinal dorsal horn GABAergic neurons during burst inputs.
40. Tang, S.-J., Liu, L., Yuan, S., Shi, Y. (2017) Wnt5a is a neuron-to-astrocyte signal regulating the pathogenesis of HIV-1/AIDS-associated neuropathic pain. The 23th Conference of the Society of NeuroImmune Pharmacology. March 29-April 1, 2017, Philadelphia, USA

41. Liu, x., Liu, B., Tang, S.-J. (2018) Neuroinflammatory mechanisms of morphine - induced hyperalgesia. Joint International Symposium on NeuroVirology and Annual Meeting of the Society of NeuroImmune Pharmacology. April 10-14, 2018, Chicago, USA
42. Yuan, S., Du, J., Shi, Y., Ru, W., Cabo Jaume, M., Liu, X., Tang, S.-J. (2018) Cellular and molecular mechanism of HIV-gp120 induced sensory neuropathy. Annual Meeting of Society for Neurosciences. Nov 3-7, 2018, San Diego, USA
43. Liu, X., Yuan, S., Zheng, J., Bae, C., Tang, S.-J. (2018) Wnt signaling regulates astrocyte activation during the pathogenesis of HIV-1 gp120-induced pain. Annual Meeting of Society for Neurosciences. Nov 3-7, 2018, San Diego, USA
44. Zheng, J., Ru, W., J.R. Adolacion, J. R., Liang, R. X., Dong, J., Potter, A., Potter, S., Varadarajan, N., Tang, S.-J. (2018) Temporal tracking of microglia subtypes in HIV associated neurocognitive disorders by single-cell RNA sequencing. Annual Meeting of Society for Neurosciences. Nov 3-7, 2018, San Diego, USA
45. Liu, X., Liu, B., Tang, S.-J. Neuroinflammatory mechanisms of morphine -induced hyperalgesia. Annual Meeting of the Society of NeuroImmune Pharmacology. April 10-13, 2019, Portland, USA

INVITED LECTURES

Lectures at professional symposia and conferences

a. National/Regional

- 10/02 Session chair
Annual Meeting of the Southern California Section of the Society of Chinese Bioscientist in America, Irvine, CA
- 2/03 “Functional genomics of synaptic plasticity”
Fellow Meeting of the Center for Neurobiology of Learning and Memory, University of California, Irvine, CA
- 4/04 “A functional genomic analysis of hippocampal synaptic plasticity”
Annual Spring Meeting of the Center for Neurobiology of Learning and Memory, University of California, Irvine, CA
- 1/06 “A Functional Genomic Analysis of the Molecular Abnormalities in the Hippocampus of NF1 Mice”
NF1 Symposium, University of California, Los Angeles, CA
- 06/12 Session Chair for ‘Signaling Mechanisms in Pain States’
Department Retreat – “Molecules and Mechanisms”
Galveston Island Convention Center, Galveston, TX

- 04/15 “HIV-associated pathological pain”
Gulf Translational Pain Research Symposium
Houston, Texas
- 08/15 “Pathogenic mechanisms of HIV-associated pain”
2015 University of Texas System Neuroscience Conference
Dallas, Texas
- 08/17 “Pathogenesis of HIV-associated neuropathic pain”
2017 University of Texas System Neuroscience Conference
Galveston, Texas
- 05/19 “NG2 glial in pain”
Society for Chinese Bioscientists in America (SCBA) – Texas Chapter 2019
Annual Symposium
Houston, Texas
- 09/19 “Microglia in HIV-associated synapse degeneration in the spinal pain circuit”
2019 University of Texas System Neuroscience Conference
San Antonio, Texas

b. International

- 11/01 Session co-chair
Seventh International Conference on the Neurobiology of Learning and
Memory, Irvine, CA.
- 11/13 Session co-chair
Molecular and Cell Biology (Part II)
BIT’s 4th World Gene Convention 2013, Nov 13-16, 2013, Haikou, China
- 5/04 International Symposium - Biotech China 2004: New Horizons in Post Genomics
Era . Beijing, China (declined)
- 10/05 “Mechanisms of protein synthesis in dendrites”
Biannual International Conference held by The Chinese Society of
Neuroscience, Chongqin, China
- 8/06 “Regulation of Activity-Dependent Protein Synthesis in Dendrites”
International Conference on Synaptic Plasticity, Memory and Pain. University of
Toronto, Toronto, Canada
- 8/07 International Conference on Neurons and Brain Diseases. University of Toronto,
Toronto, Canada (Declined)
- 07/08 “Wnt Signaling in Synaptic Plasticity”
The 5th Symposium for Chinese Neuroscientists Worldwide 2008. Changsha, P.

R. China

- 08/08 International Conference on Neurons and Brain Diseases. Seoul, South Korea (Declined)
- 06/10 BIT's 1st World Congress of NeuroTalk; June 25-28, 2010; Singapore (declined)
- 05/11 BIT's 2nd World Congress of NeuroTalk; May 22-25, 2011; Dalian, China (declined)
- 08/11 "Activity-regulated Wnt Signaling"
The 6th International Conference of Neurons and Diseases. Toyama, Japan.
- 05/12 BIT's 3rd Annual World Congress of NeuroTalk; May 18-20, 2012; Beijing, China (declined)
- 09/12 "International Conference on Central Nervous System - Drugs Effects & Novel Drug Development" (Central Nervous System-2012). September 5-7, 2012. Double Tree, Hilton Philadelphia, USA (declined)
- 06/12 "Wnt signaling and NeuroAIDS"
11th International Symposium on NeuroVirology (held jointly with 2012 Conference on HIV in the Nervous System. May 29th-June 2nd, 2012, New York City, USA
- 05/13 "Pathology of HIV-associated chronic pain: a comparative study on human patients and a mouse model"
32nd Annual Scientific Meeting of the American Pain Society. May 8-11, 2013, New Orleans, LA, USA
- 07/13 "Mechanisms of HIV-associated pathological pain"
8th International Conference of Neurons and Brain Diseases, July 2-4, 2013, Singapore
- 07/13 "HIV-associated pain syndromes: toward a mechanistic understanding"
International Symposium on 'Chronic Pelvic Painful syndrome/ Bladder Pain Syndrome', July 13, 2013, Guangzhou, P. R. China
- 11/13 "Chromosomal packaging by junk DNA"
BIT's 4th World Gene Convention 2013. Nov. 13-16/2013. Haikou, P. R. China
- 07/14 "Synaptic activity-regulated Wnt signaling"
The 9th International Conference of Neurons and Brain Diseases, July 11-17, 2014, Barcelona and Madrid, Spain
- 09/14 "Activity-regulated Wnt signaling in the pathogenesis of HIV-associated pain"
The 1st Chinese Anesthesiology Symposium, September 27-29, 2014, Xuzhou, China

- 10/14 “Synaptic activity-regulated Wnt secretion”
The 3rd International Symposium on Oncology, October 18-21, 2014,
Shijiazhuang, China
- 04/15 “Pathogenic interaction between HIV-1 and opiates in HIV-associated chronic pain”. 2015 International Conference on Global Health: Prevention and Treatment of Substance and Use Disorders and HIV. April 22-24, 2015,
Hangzhou, China
- 03/16 “HIV-associated neuropathic pain’ (**Keynote Lecture**)
The 5th World Congress of Neurology and Therapeutics, March 14-16, 2016,
London, England
- 03/16 Session co-chair, The 5th World Congress of Neurology and Therapeutics,
March 14th-16th, 2016, London, England
- 06/16 “Mechanisms of HIV-associated peripheral neuropathy”
Pain Mechanisms and Therapeutics Conference, June 5-10, 2016,
Taormina/Sicily, Italy
- 07/16 “Mechanisms of HIV-associated pain”
The 11th International Conference of Neurons and Brain Diseases, July 14-16,
2016, Vancouver, Canada
- 04/18 “Neuroinflammatory mechanisms of morphine-induced hyperalgesia”
The 15th International Symposium on NeuroVirology (held jointly with the 24th
Society for Neuroimmune Pharmacology international conference), April 10-14,
2018, Chicago, USA
- 09/18 “Wnt Signaling in Morphine-induced Pain Pathogenesis”
Sino-US Forum on Experimental Biology and Translational Medicine & 5th
International Conference of SCBA-Texas. September 19-22, 2018. Taiyuan,
China.
- 10/18 “Neuron-astrocyte interaction in the development of morphine-induced
hyperalgesia”
The 13th International Conference of Neurons and Brain Diseases, October 2-5,
2018. Taipei, Taiwan
- 08/19 “Microglia contribute to HIV-1 gp120-induced synaptic degeneration”
International Symposium on Glia and Neuroinflammation, August 3, 2019.
Guangzhou, China

Lectures at educational institutions

a. National/regional

- 3/01 “Dendritic RNA targeting and local protein synthesis”
School of Biological Sciences, University of California, Irvine, CA
- 2/01 “Regulation of local protein synthesis in dendrites”
School of Biological Sciences, University of Illinois, Urbana Champaign, IL
- 6/03 “Molecular mechanisms of synaptic plasticity”
Department of Biological Chemistry, College of Medicine, UC Irvine
- 12/03 “Functional genomic analysis of synaptic plasticity”
Institute of Genomics and Bioinformatics, University of California, Irvine, CA
- 11/06 “Wnt signaling at synapses”
Ohio State University, Columbus, Ohio
- 10/07 “Synaptic signaling and plasticity”
Department of Cell Biology and Neuroscience University of Texas Medical Branch, Galveston, Texas
- 11/07 “Molecular Studies on Synaptic Plasticity”
Department of Anesthesia, Medical School of Stanford University, Stanford, California (Declined)
- 12/07 “Molecular Mechanisms of Synaptic Plasticity”
McLaughlin Research Institute, Great Falls, Montana
- 02/08 “Molecular Studies of Synaptic Plasticity”
Department of Biochemistry, University of Missouri, Columbia, Missouri
- 05/08 “mTOR and Wnt Signaling in Synaptic Plasticity”
McKnight Brain Institute, University of Florida, Florida
- 06/09 “Activity-regulated Wnt signaling at synapses”
Neuroscience Program, University of Texas Medical Branch, Galveston, Texas
- 06//09 “Wnt secretion from neurons”
Chinese Faculty Seminar Program, University of Texas Medical Branch, Galveston, Texas
- 09/10 “Wnt5a signaling regulates A β -evoked neuroinflammatory response”
Retreat, Department of Neuroscience and Cell Biology, University of Texas Medical Branch, Galveston, Texas
- 10/12 “Pathological mechanisms of HIV-1-associated chronic pain: the role of Wnt signaling”, Department of Anatomy and Cell Biology, University of North Texas Medical Center, Dallas, Texas

- 10/12 “HIV-associated pain”
Department of Psychology, University of Texas at Arlington, Arlington, Texas
- 01/13 “Pathogenesis of HIV-associated chronic pain”
School of Dentistry, University of Minnesota, Twin Cities, Minnesota
- 06/13 “Pathogenic mechanisms of HIV-associated pain”
University of Texas MD Anderson Cancer Center, Houston, Texas
- 04/14 “HIV-associated neuropathy”
Chinese Faculty Club, University of Texas Medical Branch
- 05/14 “Pathogenesis of HIV-associated neuropathy: optical imaging approaches?”
Center for Biomedical Engineering, University of Texas Medical Branch
- 09/14 “Opioid, neuron-glia interaction and HIV-associated pain”
Center for Addiction Research, University of Texas Medical Branch
- 11/15 “HIV-associated pain”
Department of Neurology, University of Texas Medical Branch
- 06/16 “Pathogenic mechanisms of HIV-associated pain”
Division of Infectious Diseases, Department of Internal Medicine, University of Texas Medical Branch, Galveston, Texas
- 11/16 “Wnt signaling in pathogenesis of HIV-associated pain”
Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center. Omaha, Nebraska
- 02/17 “Wnt signaling in the HIV pain-related pathogenesis of spinal pain neural circuits”
Department of Pharmacology and Neuroscience, Texas Tech University, Lubbock, Texas
- 03/18 “Mechanism of opioid-induced hyperalgesia”
Chinese Faculty Club, University of Texas Medical Branch

b. International

- 3/01 “RNA targeting in dendrites”
Division of Life Sciences, University of Toronto, Scarborough, Toronto, Canada
- 9/01 “Protein synthesis in dendrites”
College of Life Sciences, Nanjing University, P. R. China
- 9/01 “RNA targeting and protein synthesis in dendrites”
Institute of Neurosciences, Chinese Academy of Science, P. R. China

- 9/01 “Regulation of protein synthesis in dendrites”
School of Life Sciences, Hunan Normal University, Changsha, P. R. China
- 08/07 “Regulation of protein synthesis in dendrites”
Institute of Mental Health, Zhongnan University, Changsha, P. R. China
- 08/07 “ Wnt signaling and synaptic plasticity”
The 1st affiliated hospital, Sun Yat-Sen University, Guangzhou, P. R. China
- 09/07 “Molecular mechanisms of synaptic plasticity”
School of Pharmaceutical Sciences, Sun Yat-Sen University, Guangzhou, P. R. China
- 09/07 “Activity-regulated Wnt signaling in synaptic plasticity”
Department of Biochemistry, Hong Kong University of Science and Technology, Hong Kong, P. R. China
- 07/12 “Mechanisms of NeuroAIDS: role of Wnt signaling in the pathogenesis of HIV-associated chronic pain”
Zhejiang Sci-Tech University, Hangzhou, China
- 07/12 “Pathogenic mechanisms of neuroAIDS: HIV-1-associated chronic pain”
Pasteur Institute, Shanghai, Chinese Academy of Science
- 11/13 “Pathogenic mechanisms of HIV-associated pain”
The Third Military Medical University, Chongqing, China
- 10/14 “Activity-regulated Wnt signaling: role in HIV-associated pathological pain”
Zhejiang Sci-Tech University, Hangzhou, China
- 04/16 “Does ‘Junk’ DNA Organize Chromosomal Packaging”
Erasmus Medical Center, Rotterdam, The Netherland